



## **APPENDIX D**

**(VERSION OF CLAIMS AS AMENDED HEREIN  
WITH MARKINGS TO SHOW CHANGES MADE)**

**(Serial No. 09/841,451)**

## VERSION OF CLAIMS WITH MARKINGS TO SHOW CHANGES MADE

2. (Amended) The airway adapter of claim 1, wherein said respiratory flow [sensing]detection component comprises[;];  
a structure within said housing for creating therein a pressure differential in respiratory gas flow;  
and  
first and second pressure bores formed in said housing and located so as to facilitate detection of  
said pressure differential.

4. (Amended) The airway adapter of claim 3, wherein said boundary of said [at least one window]detection chamber is at least partially defined by opposed windows.

5. (Amended) The airway adapter of claim 3, wherein said at least one window is optically compatible so as to permit a beam of infrared radiation to traverse said detection chamber.

13. (Amended) The airway adapter of claim 12, wherein said first and second [pressurization ports]pressure bores are at least partially formed within said at least one strut.

18. (Amended) The airway adapter of claim 17, wherein said first and second [pressurization ports]pressure bores communicate respectively with laterally spaced first and second notches formed in said at least one strut proximate a longitudinal axis of said housing.

19. (Amended) The airway adapter of claim 18, wherein said first and second [struts]notches are oriented substantially perpendicularly relative to a length of said at least one strut.

20. (Amended) The airway adapter of claim 3, wherein said respiratory flow detection component comprises first and second pressurization ports positioned on opposite sides of said detection chamber.

21. (Amended) The airway adapter of claim 3, wherein said respiratory flow detection component comprises first and second pressurization ports formed in said housing on the same side of said detection chamber.

28. (Amended) The airway adapter of claim 1, wherein said first detection component comprises a detection chamber configured to communicate with respiration of [a patient]said individual, a boundary of said detection chamber being at least partially defined by at least one window transparent to at least infrared radiation.

32. (Amended) The airway adapter of claim 31, further comprising another respiratory flow detection component in communication with said bore.

33. (Amended) The airway adapter of claim 32, wherein said another respiratory flow detection component is configured to facilitate detection of at least respiratory carbon dioxide.

34. (Amended) The airway adapter of claim 32, wherein said oxygen detection component and said another respiratory flow detection component share at least a portion of at least one element.

37. (Amended) The airway adapter of claim 36, wherein said luminescable material[ is] facilitates detection of at least oxygen.

41. (Amended) The airway adapter of claim [37]38, wherein said luminescable material is located at least partially within a sampling chamber adjacent said infrared-transparent portion.

49. (Amended) The airway adapter of claim 42, wherein said infrared-transparent portion is also substantially transparent to at least one wavelength of radiation that will excite said luminescable [composition]material and to at least another wavelength of radiation that is emitted by said luminescable [composition]material and that is indicative [or]of an amount of a substance present in respiration of [the]an individual.

55. (Amended) The method of claim 54, wherein said generating said pressure differential is effected [as]of substantially said same location within said single housing as that at which infrared techniques are employed.

61. (Amended) The method of claim 60, wherein said monitoring said amount of at least one substance comprises:  
directing infrared radiation of at least one wavelength from a first location, into said housing, through a flow path in said housing at said location, and through at least one of gases and other substances located within said flow path; and  
detecting, from said location, an intensity of said at least one wavelength of infrared radiation that has passed through said at least one of gases [or]and other substances in said flow path at said location.

63. (Amended) The method of claim 61, further comprising comparing [an]said detected intensity of said at least one wavelength of [detected]infrared radiation to an original intensity of said infrared radiation of said at least one wavelength directed through said [substance]at least one of gases and other substances.

65. (Amended) The method of claim [62]64, further comprising exposing said luminescable material to a mixture of at least gases that includes oxygen.

66. (Amended) The method of claim [62]65, comprising determining an amount of oxygen present in said mixture of at least gases based on said rate at which said intensity decreases.

67. (Amended) The method of claim 60, wherein said [measuring]monitoring said amount of at least one substance comprises [measuring]monitoring amounts of a plurality of substances in the respiration of the patient.

69. (Amended) The method of claim 68, wherein said at least employing infrared sensing techniques comprises monitoring an amount of at least one of carbon dioxide, nitrous oxide, and a gaseous anesthetic agent.

75. (Amended) An airway adapter, comprising:  
a housing with a flow passage extending therethrough;  
a first window in said housing for facilitating luminescence quenching measurements of at least one substance within said flow passage;  
a luminescable material disposed in communication with said flow passage and adjacent said first window; and  
a pair of second windows positioned in said housing on opposite sides of said flow passage for facilitating infrared measurements of at least [one]another substance within said flow passage.

80. (Amended) The airway adapter of claim 79, wherein said seat is configured to orient a radiation source and luminescence detector[ adjacent] toward said first window, an infrared source toward one second window of said pair, and an infrared detection component toward another second window of said pair.

81. (Amended) The airway adapter of claim 75, further comprising a respiratory flow detection component located along another position of said flow passage [~~that~~]than positions of said first window and said pair of second windows.

82. (Amended) An airway adapter, comprising:  
a housing including a flow passage extending through at least a portion of a length thereof;  
a first window in said housing for facilitating luminescence quenching measurements of at least one substance in said flow passage;  
a luminescable material disposed in communication with said flow passage and adjacent said first window; and  
a second window in said housing for facilitating infrared measurements of at least [~~one~~]another substance in said flow passage.

83. (Amended) The airway adapter of claim [81]82, wherein a membrane carrying said luminescable material is disposed on an inside of said first window.

84. (Amended) The airway adapter of claim [81]82, wherein said first window is positioned on a top of said housing.

85. (Amended) The airway adapter of claim [81]82, wherein said second window is positioned on a side of said housing.

86. (Amended) The airway adapter of claim [81]82, wherein said housing includes a seat for receiving a complementarily configured portion of a transducer.

87. (Amended) The airway adapter of claim 86, wherein said seat is configured to orient a radiation source and luminescence detector[ adjacent] toward said first window and an infrared source and infrared detection component toward said second window.

88. (Amended) The airway adapter of claim [81]82, further comprising a respiratory flow detection component located along another position of said flow passage [~~that~~]than positions of said first window and said pair of second windows.

89. (Amended) An airway adapter, comprising:  
a housing with a flow [~~passaged~~]passage extending through at least portion of a length thereof;  
a pair of windows positioned on opposite sides of said housing; and  
luminescable material positioned proximate at least a portion of one window of said pair of windows.